

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for determining a color rendering capability of at least one color imaging device with multiple color channels, the method comprising:

obtaining spectral sensitivity curves for two or more of the multiple color channels in the color imaging device; and

determining a Universal Measure of Goodness factor based on the obtained spectral sensitivity curves;

~~determining an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;~~

~~wherein determining an image quality value further comprises determining a Universal Measure of Goodness factor based on the obtained spectral sensitivity curves, wherein the determining an image quality value is based on the determined Universal Measure of Goodness factor and at least one other quality factor.~~

2. (Currently Amended) The method as set forth in claim 1 wherein determining an image quality value further comprises determining a ~~m-factor~~ μ-factor based on the obtained spectral sensitivity curves, wherein the determining an image quality value is based on the ~~m-factor~~ μ-factor and at least one other quality factor.

3. (Currently Amended) A method for determining a color rendering capability of at least one color imaging device with multiple color channels, the method comprising:

obtaining spectral sensitivity curves for two or more of the multiple color channels in the color imaging device; and

determining a μ-factor based on the obtained spectral sensitivity curves; and

~~determining an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;~~

~~wherein determining an image quality value further comprises determining a m -factor based on the obtained spectral sensitivity curves, wherein the determining an image quality value is based on the m -factor determined μ -factor and at least one other quality factor;~~

~~wherein the determining an the image quality value is based on a relationship between the determined m -factor μ -factor and the at least one other quality factor, the image quality value being a substantial average of a minimum and a maximum value for the at least one other quality factor associated with the determined m -factor μ -factor.~~

4. (Currently Amended) A method for determining a color rendering capability of at least one color imaging device with multiple color channels, the method comprising:

obtaining spectral sensitivity curves for two or more of the multiple color channels in the color imaging device; and

determining a μ -factor based on the obtained spectral sensitivity curves; and

~~determining an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;~~

~~wherein determining an image quality value further comprises determining a m -factor based on the obtained spectral sensitivity curves, wherein the determining an image quality value is based on the m -factor determined μ -factor and at least one other quality factor;~~

~~wherein the at least one other quality factor is a delta E factor.~~

5. (Currently Amended) A method for determining a color rendering capability of at least one color imaging device with multiple color channels, the method comprising:

obtaining spectral sensitivity curves for two or more of the multiple color channels in the color imaging device; and

determining a μ -factor based on the obtained spectral sensitivity curves; and

determining an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;

~~wherein determining an image quality value further comprises determining a m factor based on the obtained spectral sensitivity curves, wherein the determining an image quality value is based on the m factor determined μ -factor and at least one other quality factor;~~

wherein the image quality value is a color difference metric value.

6. (Cancelled).

7. (Previously Presented) The method as set forth in claim 1 wherein the at least one other quality factor is a delta E factor.

8. (Previously Presented) The method as set forth in claim 1 wherein the image quality value is a color quality and noise sensitivity metric value.

9. (Original) The method as set forth in claim 1 further comprising evaluating the color rendering capability of the color imaging device based on the determined image quality value.

10. (Previously Presented) The method as set forth in claim 9 wherein the evaluating further comprises comparing the image quality value of the color imaging device against an image quality standard.

11. (Currently Amended) A method for determining a color rendering capability of at least one color imaging device with multiple color channels, the method comprising:

obtaining spectral sensitivity curves for two or more of the multiple color channels in the color imaging device;

determining an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device; and

evaluating the color rendering capability of the color imaging device based on the determined image quality value;

wherein the evaluating further comprises comparing the image quality ~~values of two or more of the color imaging devices against each other~~ value of the color imaging device against respective image quality values for two or more other color imaging devices.

12-21. (Cancelled).

22. (Previously Presented) An imaging device analyzing system, the system comprising:

a source for spectral sensitivity curves for two or more of the multiple color channels in a color imaging device; and

an image quality processing system that determines an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;

wherein the image quality processing system determines a Universal Measure of Goodness factor based on the obtained spectral sensitivity curves, wherein the image quality value is based on the Universal Measure of Goodness factor and at least one other quality factor.

23. (Currently Amended) The system as set forth in claim 22 wherein the image quality processing system further comprises a ~~m-factor~~ μ -factor processing system that determines a ~~m-factor~~ μ -factor based on the obtained spectral sensitivity curves, wherein the image quality value is based on the ~~m-factor~~ μ -factor and at least one other quality factor.

24. (Currently Amended) An imaging device analyzing system, the system comprising:

a source for spectral sensitivity curves for two or more of the multiple color channels in a color imaging device; and

an image quality processing system that determines an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;

wherein the image quality processing system further comprises a ~~m-factor~~ μ -factor processing system that determines a ~~m-factor~~ μ -factor based on the obtained spectral sensitivity curves, wherein the image quality value is based on the ~~m-factor~~ μ -factor and at least one other quality factor;

wherein the image quality processing system determines an image quality value based on a relationship between the determined ~~m-factor~~ μ -factor and the at least one other quality factor, the image quality value being a substantial average of a minimum and a maximum value for the quality factor associated with the determined ~~m-factor~~ μ -factor.

25. (Currently Amended) An imaging device analyzing system, the system comprising:

a source for spectral sensitivity curves for two or more of the multiple color channels in a color imaging device; and

an image quality processing system that determines an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;

wherein the image quality processing system ~~further comprises a m-factor processing system that determines a m-factor based on the obtained spectral sensitivity curves, wherein the image quality value is based on the m-factor and at least one other quality factor~~ determines the image quality value based on a relationship between the determined μ -factor and the at least one other quality factor, the image quality value being a substantial average of a minimum and a maximum value for the at least one other quality factor associated with the determined μ -factor;

wherein the at least one other quality factor is a delta E factor.

26. (Currently Amended) An imaging device analyzing system, the system comprising:

a source for spectral sensitivity curves for two or more of the multiple color channels in a color imaging device; and

an image quality processing system that determines an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device;

wherein the image quality processing system further comprises a ~~m-factor~~ μ -factor processing system that determines a ~~m-factor~~ μ -factor based on the obtained spectral sensitivity curves, wherein the image quality value is based on the ~~m-factor~~ μ -factor and at least one other quality factor;

wherein the image quality value is a color difference metric value.

27. (Cancelled).

28. (Previously Presented) The system as set forth in claim 22 wherein the at least one other quality factor is a delta E factor.

29. (Previously Presented) The system as set forth in claim 22 wherein the image quality value is a color quality and noise sensitivity metric value.

30. (Original) The system as set forth in claim 22 further comprising an evaluation system that evaluates the color rendering capability of the color imaging device based on the determined image quality value.

31. (Original) The system as set forth in claim 30 wherein the evaluation system further comprises a comparison system that compares the image quality value of the color imaging device against an image quality standard.

32. (Currently Amended) An imaging device analyzing system, the system comprising:

a source for spectral sensitivity curves for two or more of the multiple color channels in a color imaging device;

an image quality processing system that determines an image quality value for the color imaging device from the spectral sensitivity curves for the two or more of the multiple color channels in the color imaging device; and

an evaluation system that evaluates the color rendering capability of the color imaging device based on the determined image quality value;

wherein the evaluation system further comprises ~~a comparison system that compares the image quality values of two or more of the color imaging devices against~~

~~each other~~ comparing the image quality value of the color imaging device against respective image quality values for two or more other color imaging devices.

33-44. (Cancelled).